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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/233,249	01/19/1999	HAROLD V. PUTMAN	D-1086	7737

28995 7590 03/21/2002

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EXAMINER

CARLSON, JEFFREY D

ART UNIT PAPER NUMBER

2162

DATE MAILED: 03/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 11

Application Number: 09/233,249  
Filing Date: January 19, 1999  
Appellant(s): PUTMAN, HAROLD V.

\_\_\_\_\_  
Ralph E. Jocke  
For Appellant

**MAILED**  
MAR 21 2001  
Technology Center 2100

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/27/02.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with. Applicant states that each claim is an independent group

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because each claim recites at least one element not found in the prior art, rather than defining why each group differs from the other groups. At least, certain apparatus claims should be grouped with the corresponding method claims: claim 23 with 27, 31 with 32, 33 with 40, 47 with 51 and 52 with 56.

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

Bosak, Jon, "XML, Java and the future of the web" <http://www.ibiblio.org/pub/sun-info/standards/xml/why/xmlapps.htm>, dated 3/10/1997.

Rivett-Carnac, "An object-oriented framework for transaction capture using co-operating business rule components" IEEE, 0-8166-7840, 2/1997, pgs 126-134.

5,933,816

Zeanah et al

8-1999

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The amendment filed 8/7/01 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment

shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The Examiner cannot locate original disclosure supporting the features of claims 45 of 47 whereby a computer provides two different screen elements that are selectable with two different input devices. Claim 45 sets forth two input devices operatively connected to the same computer. This has no original support. Claim 45 also sets forth output of a first interface when the first input device is enabled and output of a second interface when the second input device is enabled. This has no original support. Claim 47 sets forth a first screen element selectable with a first input device and a second screen element selectable with a second input device. This has no original support.

Claims 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Bosak (XML, Java, and the future of the web). Bosak teaches the basics of xml and style sheets. Xml documents provide the code for clients (internet-connected computers with browsers) to display a page/interface. The xml documents merely specify the content of the screen/interface/page, leaving the particular formatting/screen arrangement to the data from the style sheets. This enables a single xml document to determine the same content, yet be displayed/rendered differently on various different output devices such as screens and paper printing via the style sheets. A web browser that renders any xml document with clickable links, selectable fields, buttons, etc is taken to inherently provide an interface output. Also, the web connected computers required for xml viewing are taken to inherently include standard input devices such as

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keyboards and mouse - Bosak also describes "clicking". Mere button clicking triggers an event which causes at the very least, the button to be re-drawn on the interface screen as indented or "pushed-in" while it is being clicked. This "event processing" is provided inherently by standard browsers; the programming (event processor) for it packaged with the browser.

Claims 12-22, 28-30, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosak. It would have been obvious to one of ordinary skill at the time of the invention to have provided standard printers and driver software with the types of computers described by Bosak so that users could make printouts of the various screens. A standard printer is taken to meet applicant's "transaction function device" of these claims; a print job can be sent to the printer using different input means such as with a mouse or with a keyboard as is well known, relying on an input device to trigger a print event handled by known print event processors (print drivers) in software [claim 20]. Any software, including print driver software is taken to be an instruction document. As best understood regarding claims 21 and 41, it is well known for printer driver software to provide an interface to capture/specify the user's input regarding desired print parameters (# copies for example) and to present on-screen elements to the user indicating a print job has started. It would have been obvious to one of ordinary skill at the time of the invention to have employed such printer driver features to enable the web clients of Bosak to print screens/information. Further, web-connected kiosks are well known to include touch screens. It would have been obvious to one of ordinary skill

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at the time of the invention to have employed any well known input devices such as touch screens for ease of data entry; such are capable of processing Bosak's xml documents. The distributed clients' software (browser) that interprets the documents described by Bosak allow processing of the xml documents to be platform independent as described within [pg 5, #2]. Providing a second computer with a different operating system to process the same xml documents is suggested by Bosak [pg 6 "it is independent of any platform, vendor or application, so it can be used to exchange solution information without regard to the system its coming from or going to]. To have provided different monitor types and/or sizes would have been obvious for the various disparate network-connected end users as is well known; the thrust of Bosak is to provide programming that can be consumed by different users with different machine types and operating systems. Regarding the character based vs. graphical displays, standard monitor screens display pixels, whether representing characters or graphics. A well known and standard graphical display is also taken to be a character display device, depending on the screen contents to be rendered.

Claims 1-11, 23-27, 33-40, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivett-Carnac (An Object-Oriented Framework for Transaction Capture Using Co-operating Business Rule Components) in view of Bosak. Rivett-Carnac teaches a framework for transaction processing systems for a bank where the user interface is decoupled from the business logic. This allows the business rules to be developed and/or changed independent of the graphical user interface (GUI). The

framework includes interface objects such as transaction fields that are coupled to business rules for validations. When the user interacts with the system via the input device(s), events are triggered which change stored values and which also changes the interface display. "This requires framework mechanisms for notification of changes to fields entered by the user, triggering of rule processing to validate the entry and recalculate dependant data, updating the GUI display and informing the user of any warnings or errors which may arise" [section 3.2]. It would have been obvious to one of ordinary skill at the time of the invention to have included operable action menus as part of the interface so as to make data entry easy as these are well known GUI techniques that end users would be comfortable with. Section 3.1 describes that the various rules may be modularly implemented via library functions (DLL/subroutines). Page 133 describes when an attribute's value is changed by a user (via input device), an event is triggered (change warning) which is handled by an event handler (event processor). The GUI is described on page 134 as being flexible and independent of end user platform. It would have been obvious to one of ordinary skill at the time of the invention to have provided such a banking transaction system with xml and style sheets as described by Bosak so that the data handling and transaction logic can be constructed without regard to output/interface, relying on style sheets to define the arrangement of the xml content. This would enable various different end user machines to access the system without requiring redesign specific to the end user hardware. Such an approach would be obvious for an ATM cash dispensing machine so that many geographically dispersed machines (end users) can access the financial transaction system over a



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controlled network. The user input would trigger an event processor to operate the cash dispenser.

Claims 45-49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeanah et al (US5933816). Zeanah et al teaches a system and method of delivering financial services and transactions to various remote devices, by using modular service sets. Zeanah et al recognizes an old problem where interfaces between different types of remote devices and the bank's central computer had to be developed separately, depending on the device. Zeanah et al provides interfaces whereby the screen content is separated from screen format to enable a presentation manager to provide different screens for each particular device [col 4 lines 1-6]. Column 13 lines 20-23 describe the mini-app dialog component which manages the business functions (funds xfer, bill payment, etc). It is "responsible for the content of information on pages (screens) and the flow of customer interaction, but preferably not the style and layout of the presentation." Style templates (style sheets) are used to generate various screens for PDAs, PCs, ATM, etc [col 7 lines 30-33]. The mini-app component instantiates and calls transaction executor components 91 to do transactions with external service providers and also operates remote devices, such as cash dispensers [col 13 lines 52-55]. The touch point and display set 30 provides the actual customer display and input facility. This set displays pages on the screen and sends customer input (choice selections) to the delivery system 12. It preferably comprises a browser. See column 6 lines 18-57. The presentation manager

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component 52 maps the screen info into a specific style layout in a device-specific presentation format (CAT=ATM, kiosk, phone screen, PDA, etc). Style templates are also used [col 7 lines 24-42]. The navigation shell component 82 informs the customer of the choices (mini-apps) that are available, based on the customer's relationship and business rules [col 12 lines 41-45, 58-60]. As can be seen, the interface software calls various modular software components according to captured user input. The peripheral device services set is responsible for handling application requests for peripheral device services and for managing the software components that handle such requests [col 7 lines 62-67]. The peripheral device handler component 61 comprises a plurality of handlers, with each providing a generic device management interface and a specific service interface [col 8 lines 1-13]. The modular nature of the system allows creation and testing of each component separately. Thus, any computer can use the same universal central application and request/call specific software components (event processors) to carry out the requested function such as user validation or cash dispensing.

Applicant's "instruction document" is taken to read on any program or collection of code, whether in a module, exe, dll, or simply a section of code in a longer program. Regarding claim 45 as best understood, it would have been obvious to one of ordinary skill at the time of the invention to have provided various types of input hardware such as keypads and/or touch screens so as to capture user information/requests. It would have been obvious to one of ordinary skill at the time of the invention to have called the event processor to generate the interface screen using the style templates specific to

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the selected/enabled input device so that interfaces can be provided for various hardware devices. Regarding claim 47, Zeanah et al teaches various user interface data capture elements such as fields, choices, etc. It would have been obvious to one of ordinary skill at the time of the invention to have operated the mentioned cash dispenser responsive to one selectable screen element and to activate a deposit mechanism or receipt printer responsive to another, so that the user can easily operate the devices.

Claims 50 and 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeanah et al in view of Bosak. Zeanah et al does not teach XML. It would have been obvious to one of ordinary skill at the time of the invention to have employed the XML document instructions/tags/programming taught by Bosak to carry out the software elements of Zeanah et al. This would enable Zeanah et al to take advantage of the machine/OS independent nature of XML programming. Regarding claim 52, it would have been obvious to one of ordinary skill at the time of the invention to have provided code sections/pages/modules/documents in XML to render each type of screen required so that the screens can be provided modularly. It is well known and would have been obvious to one of ordinary skill at the time of the invention to have delineated such programming code with delineating tags.

**(11) Response to Argument**

With regards to the new matter objection: while original claims 12, 13 and 17 provide support for *two* computers, each with their own input devices, no support is provided for the subject matter of claims 45 and 47. The specification page 19 line 17 to page 20 line 3 teaches general theory that a similar instruction document can control interfaces and devices of machines that are substantially different, including different input devices. However, this does not provide full support for claims 45 and 47. Applicant is required to cancel the new matter in the reply to this Office Action.

Bosak is prior art. Applicant has argued that we can't be certain of the date, yet no evidence has been presented to suspect otherwise. The reference is dated 3/10/1997 and that date is taken to be the effective date of the reference. This date is taken to be a publication date. Further, a newly acquired document provides evidence of the date of this article. W3C Architecture Domain [Extensible Markup Language (XML)] (attached to this Examiner's Answer) indicates that (top of page 5) The First XML Conference was held in San Diego, CA by the GCA and Jon Bosak's March 1997 article entitled "XML, Java, and the future of the web" was presented. In fact, clicking the underlined article hyperlink takes you to the same url for the Bosak article that the examiner cited and applied<sup>1</sup>. Note: the examiner is not relying on the teachings of W3C Architecture Domain [Extensible Markup Language (XML)] as part of any art

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<sup>1</sup> <http://www.ibiblio.org/pub/sun-info/standards/xml/why/xmlapps.htm>

rejection, rather it is used solely to provide evidence of the asserted date of the applied Bosak article. Further still, using Netscape's "Page Info" feature indicates a posting (and therefore, publication) date of 3/10/1997. As an exercise, the examiner posted an old html file (last saved 2/20/01) from his hard drive to the internet on 10/10/01.

Netscape's Page Info feature indicates a "Last Modified" date of 10/10/01; this is taken as the posting/publication date. See attached supporting printouts. Further still, applicant has provided a printout of the parent directory containing the Bosak article file. The printout indicates the date for the file "xmlapps.htm" is 3/10/1997, as asserted by the examiner.

Applicant's arguments that the applied art does not teach an ATM is not convincing. First, most claims do not call for an ATM. Second, the claims mention only an "automated transaction machine" in the preamble, and refer to such machine in the body of the claims. Further still, applicant's definition [pg 1 lines 19-20] of automated transaction machine calls for only a device which carries out transactions, including transfers of value. This definition is not believed to exclude an automated transaction machine which generates transactions "without value" or "of low value". Nonetheless, "value" in this definition is quite broad and does not require currency. Any computer instructions when processed can be taken to be "transactions"; if a programmer took the time to program the instructions, they can be said to have "value", although currency-based value need not be present. A computer which carries out instructions automatically is to be taken to be an automated transaction machine. Applicant argues

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that Bosak does not teach a computer inside a machine. Applicant's broad definition of the transaction machine containing a computer can be met by a processor inside a computer case. Applicant argues that Bosak does not teach screen elements and visual attributes produced by a style sheet. Page 8 of Bosak teaches style sheets used with XML that specifies page layout features

Applicant has made continuing arguments for each claim that each of the claims' elements is not provided by the prior art. The basis for the rejection above is believed to address each limitation.

Applicant agrees that standard browsers (which render XML and style sheet programming documents onto the screen as an interface) may include integrated event processing for button clicks. For example, clicking a button results in redrawing the button on-screen so that the button appears depressed. Applicant argues that such admitted features do not imply the existence of separate event processor software components which are sent events responsive to a document. Examiner does not see this type of "separate" language in the claims.

Applicant argues that Bosak does not teach print drivers corresponding to a document. Applicant asserted that it would have been obvious to one of ordinary skill at the time of the invention to have included printers and requisite printer driver (software programming file(s)) to operate the printers. Examiner has stated that any programming file, module or section of code is taken to be a programming "document". The suggested printer driver represents the document; Bosak need not mention such.

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Applicant argues that the examiner has not taught how Rivett-Carnac could be modified to include the features of Bosak (xml and style sheet programming). The examiner need not demonstrate the details of how such a combination is carried out, such is believed to be well within the knowledge of one of ordinary skill.



For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jeffrey D. Carlson  
Examiner  
Art Unit 2162



jdc  
March 19, 2002

Conferees  
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- <http://www.geocities.com/usa00tofees.htm>
- Image: <http://www.uspto.gov/images/uspaleft.gif>
- Image: <http://www.uspto.gov/images/uspap0p.gif>
- Image: <http://www.uspto.gov/images/uspap000.gif>
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- Image: <http://www.uspto.gov/images/uspap005.gif>
- Image: <http://www.uspto.gov/images/uspap006.gif>
- Image: <http://www.uspto.gov/images/usaunsparent.gif>

**Location:** <http://www.geocines.com/photofes.htm>

File MIME Type: text/html

**Source:** Currently in disk cache

Local cache file: MINJSS2K.HTM

**Last Modified:** Wednesday, October 10, 2001 2:47:01 PM Local time

**Last Modified:** Wednesday, October 10, 2001 6:47:01 PM GMT

**Content Length: 45039**

**Expires:** No date given

Charset: iso-8859-1

**Security:** This is an insecure document that is not encrypted and offers no security protection.

1 pto fees. htm

was last saved on  
my hard drive 2/20/01.  
uploading it to the web on 10/10/01  
gives us this info

∴ this screen shows  
us publication date



REAL LOOK!

- REAL LOOK!

File MIME Type: text/html












Local cache file: MU07CEU0.HTM

**Last Modified:** Tuesday, March 11, 1997 2:04:30 AM GMT

**Expires:** No date given

**Security:** This is an insecure document that is not encrypted and offers no security protection.

# Index of /pub/sun-info/standards/xml/why

Name	Last modified	Size	Description
 <a href="#">Parent Directory</a>	24-May-1999 11:51	-	
 <a href="#">4myths.htm</a>	28-Jan-1999 23:11	15k	DATE CREATED
 <a href="#">xmlapps.961117.htm</a>	12-Sep-1997 13:27	29k	IS AFTER FILING
 <a href="#">xmlapps.htm</a>	10-Mar-1997 21:04	30k	DATE OF APPLICATION
 <a href="#">xmlapps.htm.zip</a>	11-Mar-1997 00:23	11k	
 <a href="#">xmlapps.html</a>	10-Mar-1997 21:04	30k	
 <a href="#">xmlapps.ps</a>	10-Mar-1997 21:12	430k	
 <a href="#">xmlapps.ps.zip</a>	11-Mar-1997 00:23	52k	
 <a href="#">xmlapps.rtf</a>	10-Mar-1997 21:13	49k	
 <a href="#">xmlapps.rtf.zip</a>	11-Mar-1997 00:23	13k	
 <a href="#">xmlapps.zip</a>	11-Mar-1997 00:21	76k	

Apache/1.3.19 Server at www.ibiblio.org Port 80

# Extensible Markup Language (XML)

[Core Drafts](#) · [Developer Discussion](#) · [Events/Pubs \(translations\)](#) · [Software](#) · [Bookmarks](#)

The Extensible Markup Language (XML) is the universal format for structured documents and data on the Web. [XML in 10 points](#) explains XML briefly. The base specifications are [XML 1.0](#), W3C Recommendation Feb '98, and [Namespaces](#), Jan '99. The [XML Activity Statement](#) explains the W3C's work on this topic in more detail. For related work, see:

Nearby: [XML Protocol](#) · [XML Schema](#) · [XML Query](#) · [XLink](#), [XPointer](#), [XML Base](#) · [DOM](#) · [RDF](#)  
· [CSS XSL](#) · [XHTML](#) · [MathML](#) · [SMIL](#) · [SVG](#) · [XML Signature and Canonicalization](#)

## New and Upcoming (or Recent)

- [XML Processing Model Workshop](#), a W3C workshop (members and invited experts), Cambridge, 12-13 July 2001.  
[Call for participation](#) (member-only link).
- [Knowledge Technologies 2001](#), a GCA conference  
March 4-7, Austin, TX, USA
- [XML Media Types](#), IETF Proposed Standard January 2001
- [XML-related Activities at the W3C](#)  
by C.M. Sperberg-McQueen Jan 2001 on [xml.com](#)
- [Of Standards and Standard Makers](#)  
Oct 2000 on [xml.com](#)
- ... [XML Activity plans](#), [W3C Technical Reports](#)

## Working Drafts

Follow the links above for details about the drafts issued by the XML Query, XML Schema, and XML Linking WGs. The documents listed below are the working drafts issued by the [XML Core](#) working group.

[XML Inclusions \(XInclude\)](#) Last Call working draft issued 16 May 2001

- [requirements section](#) of original proposal
- working group: [XML Core](#)
- [issues](#)

- feedback: [www-xml-xinclude-comments](http://www.xml-xinclude-comments)

### XML Information Set Proposed Recommendation issued 10 August 2001

- XML Information Set Requirements Feb '99
- working group: XML Core
- feedback: [www-xml-infoet-comments](http://www.xml-infoet-comments)
- discussion: [xml-dev](mailto:xml-dev), [comp.text.xml](mailto:comp.text.xml)

### XML Fragment Interchange Candidate Recommendation as of 12 February 2001

- Nov '98: W3C Note: XML Fragment Interchange Requirements, Version 1.0
- working group: XML Core
- feedback: [www-xml-fragment-comments](http://www.xml-fragment-comments)

## Developer Discussion

If you've read the [FAQ](#), but you want to get more involved, try one of these discussion forums:

### comp.text.xml

USENET newsgroup for "The Extensible Markup Language (XML)" chartered 1998/07/15 ([announcement on news.announce.newgroups via dejanews](#))

### xml-dev

"XML-DEV is an informal unmoderated list to support those who are interested in the implementation and development of XML. ..."

Peter Murray-Rust, 25 Feb 1997

[archive at xml.org](#), [egroups archive](#) (formerly <mailto:xml-dev@ic.ac.uk>, archived at <http://www.lists.ic.ac.uk/hypermail/xml-dev/>)

### xml-uri

discussion of relative URI references in XML namespace declarations. [xml-uri archive](#)

- XML Plenary Decision on relative URI References In namespace declarations  
announced 11 Sep 2000

... and there are many more

see: Robin Cover's [XML Mailing Lists, Discussion Groups, Newsgroups, XML: Working Groups, SIGS, Design and Development Initiatives](#)

## Timeline: Events and Publications

Historical events in and around the W3C XML Activity include Recommendations:

- Jan 2001: IETF Proposed Standard: XML Media Types

ietf-xml-mime mailing list

- Nov '99 : XSL Transformations (XSLT) Version 1.0, XML Path Language (XPath) Version 1.0  
press release: W3C Issues XSLT XPath Recommendations
- Jun '99 : W3C Recommendation: Associating stylesheets with XML documents  
(press release)
- Jan '99: W3C Recommendation: Namespaces in XML  
(press release, coverage) (also: articles by WG members Clark, Bray and one by Bourret)
- Feb 1998 : W3C Recommendation: Extensible Markup Language (XML) 1.0 (2nd edition 6 October 2000)  
(press release)  
decision record, feedback, errata

... and conferences, workshops:

May 2000: WWW9: Amsterdam

- XML Protocols Shakedown panel notes May 21 2000 by Dan Connolly in the xml-dist-app archive.

March 2000 IETF 47: Adelaide, Australia, 26–31

- B2BXML BOF Michael Condry (Thu, Mar 02 2000)

Feb/Mar 2000: XTech 2000 in San Jose, California

- @@presentations by W3C Team members Eric Prud'hommeaux, Michael Sperberg-McQueen, Henry Thompson and Daniel Veillard.
- schema and query town hall meetings
- pre-conference chat: XHTML – a bridge to the Web of the future  
log log of xml/protocols break-out

Dec '99: XML 99 in Philadelphia (a GCA Conference)

- XML Schema tutorials materials: slides, additional materials by Henry Thompson
- xml-dist-app : discussion of XML in distributed applications: transaction protocols, XML RPC (e.g. SOAP), etc.
- W3C XML Activity chat  
CFP ( via http)
- (@@presentation materials? Judy Brewer, Bert Bos, Dan Connolly, Dave Raggett, Joseph Reagle, Chris Lilley, Michael Sperberg-McQueen from the W3C Team)

Oct '99: XML One Europe, in London

Sep '99: XML World, in Chateau Laurier

- Sep '99: XML Activity enters Phase III: XML Query Working Group begins
- @@Chris's presentation?

Aug '99: XML Developers' Conference, in Montreal (a GCA Conference)

May '99: The Eighth International World Wide Web Conference (WWW8), in Toronto

- materials from W3C presentations
- XML and the Second-Generation Web  
by Jon Bosak and Tim Bray, May '99 in Scientific American

Apr '99: XML Europe '99, Granada, Spain, by GCA

some presentation materials:

- XML in Context: W3C by Dan Connolly
- Expected from the W3C in 1999 by Tim Bray (original ppt zip'd)

Apr '99: XML-DSig '99: The W3C Signed XML Workshop

Mar '99: XTech '99, San Jose, California

Dec '98: W3C Workshop: Query Languages

Nov '98: XML '98, Markup Technologies '98 conferences hosted by GCA in Chicago

program includes a W3C Standards Update plus sessions on CSS2, DOM, XLink, DCD, RDF, Namespaces, WIDL, PGML, VML, Web Graphics, Querying XML, XFDL

- Oct 98: The XML Revolution by Dan Connolly  
in Nature's Web Matters
- Sep '98: Extensible Forms Description Language (XFDL)  
4.0 submitted to W3C

Aug '98: Metastructures 1998 & XML Developers' Conference hosted by the GCA

- Aug '98: Document Content Description for XML (DCD) submitted to W3C
- Aug '98: XML-QL: A Query Language for XML submitted to W3C
- July '98: IETF Informational RFC: XML Media Types

May '98: W3C Workshop: Shaping the Future of HTML

Apr '98: Seventh International World Wide Web Conference

Mar 1998: XML'98: The Conference

- Evolution of Web Data Formats, by Dan Connolly
- XML in Mozilla demonstrated at Dev Day

Dec '97: SGML/XML '97

- W3C Issues XML 1.0 as a Proposed Recommendation
- Reports From the W3C SGML ERB to the SGML WG And from the W3C XML ERB to the XML SIG
- Oct 97: XML Principles, Tools and Techniques, Fall '97 issue of W3J
- Oct 97: W3C Note: W3C Data Formats on XML, SGML, HTML, and RDF

Sep '97: SGML/XML Asia Pacific '97 conference hosted by the GCA in Sydney, Australia

- Sep 97: Web Interface Definition Language (WIDL) submitted to W3C

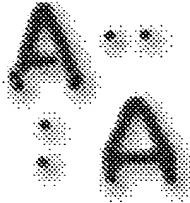
Aug '97: XML Developers Day, Montreal, Canada, August 21, 1997

Mar 97: First XML Conference in San Diego, by the GCA

- Mar 97: *XML, Java, and the Future of the Web* by Jon Bosak

SGML 96 Conference in Boston

- Nov 96: initial XML draft



## Translations

See also: W3C's translation policy and other W3C translations, translations of XML Base, XML Schema (Parts 0, 1, 2), Associating style sheets with XML documents, 1.0

Chinese (Simplified)

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)

Chinese (Traditional)

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)

Estonian

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)

French

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)
- *Namespaces in XML* (W3C Recommendation)

German

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)
- *Namespaces in XML* (W3C Recommendation)
- *XML Inclusions* (XInclude) (W3C Working Draft)

Indonesian

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)
- *Namespaces in XML* (W3C Recommendation)

Interlingua

- *Namespaces in XML* (W3C Recommendation)

Italian

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)

Japanese

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)
- *Namespaces in XML* (W3C Recommendation)
- SGML Cafe for information in Japanese

Korean

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)
- The XML FAQ by Peter Flynn et. al. Version 1.41 (6 October 1998)  
thanks to Techno 2000 Project

Norwegian (Norwegian, Bokmål)

- *Namespaces in XML* (W3C Recommendation)

Romanian

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)

Russian

- *Extensible Markup Language (XML) 1.0 (Second Edition)* (W3C Recommendation)
- *Extensible Markup Language (XML) 1.0 (Second Edition)* (W3C Recommendation)
- *Extensible Markup Language (XML) 1.0 (Second Edition)* (W3C Recommendation)
- *Namespaces in XML* (W3C Recommendation)

See <http://croll.hotbox.ru/W3C/Consortium/Translation/russian.html> for translations of other W3C specifications.

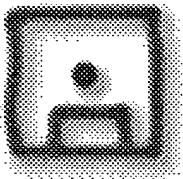
Spanish

- *Namespaces in XML* (W3C Recommendation)

See <http://www.sidar.org/traduc/traduc.htm> for more Spanish translations.

Swedish

- *Extensible Markup Language (XML) 1.0* (W3C Recommendation)



## XML software

A number of commercial vendors are preparing XML software tools. In addition, aided by XML's relative simplicity, many individuals and academic institutions are undertaking XML efforts. Leading examples of XML tools available in source form use include the following:

### Apache XML Project

- Xerces – XML parsers in Java, C++ (with Perl and COM bindings)
- Xalan – XSLT stylesheet processors  
Java version 1.2.D02 released Aug 2000
- Cocoon – XML-based web publishing, in Java created January 1999.
- FOP – XSL formatting objects, in Java  
releases include version 0.14.0 of 09-Aug-2000



- Xang – Rapid development of dynamic server pages, in JavaScript
- SOAP – Simple Object Access Protocol  
Version 2.0 released August 18, 2000

#### libxml and libxsl, the Gnome XML and XSLT toolkit

- written by Daniel Veillard
- open source implementation in C
- a DOM implementation is available separately

#### SAX: The Simple API for XML

David Megginson et. al., May 1998

#### expat

XML parser in C, by James Clark, 1998, 1999

- as a perl module: XML::Parser, maintained by Clark Cooper
- Tcl bindings: TclExpat by Steve Ball

#### LT XML

an XML developers' toolkit released 24 June 1998 from the Language Technology Group at the University of Edinburgh.

21 July 1999: version 1.1

XML well-formedness checker and validator

#### XML for Java – XML4J

from IBM AlphaWorks

4 Aug '99 Update: "XML4J Early Access release

Preliminary support for W3C XML Schema Language and access to the DTD via the DOM. "

13 May '99 Update: "New v2.0.9 contains bug fixes, DOM Implementation classes are no longer final, modified license, and multiple parser objects can be active at once. "

Nov '98: TreeDiff, DataCraft, PatML, BeanMaker, Bean Markup Language, TeXML, Dynamic XML for Java, XML Productivity Kit for Java, XML EditorMaker

#### Web Workshop – XML

Microsoft 's validating XML processor and XML DOM (level 1) plus various tools, samples, tutorials and online docs.

#### Lark

a non-validating XML processor written in Java  
by Tim Bray, 5-January-1998

#### XP

another non-validating XML processor written in Java  
by James Clark, 1997, 1998

#### Python and XML Processing

preliminary XML parser, SAX interface, DOM support, etc.  
(release 0.5.1 13-Apr-1999)

## TclXML

an XML parser written in Tcl by Steve Ball.

## XML Testbed

by Steve Withall

xt-beta-1-980816.zip

Montreal Slides

## JUMBO

a Java-based XML browser designed for the Chemical Markup Language, an XML application developed by Peter Murray-Rust, April 1997.

...

XPointer and XLink implementations, 17 Dec 1998 by Steven J. DeRose

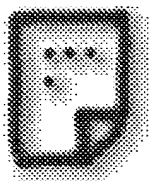
...

Robin Cover's Public SGML/XML Software list

Note: This list is not intended to be an exhaustive list of XML software, but rather a list of software that we have evaluated and found useful to the developer community. If you want your software in this list,

- make sure the license terms clearly allow free non-commercial use, and
- invite the developer community to use it via the public forums above.

Preference is given to Open Source software.



## Bookmarks: Recommended Reading

xmlhack – developer news from the XML community

news, opinions, tips and issues concerning XML development. since 1999.

SGML/XML Web Page

Robin Cover's bibliography and background information on SGML, HyTime, and DSSSL, since 1994; especially:

What's New in SGML/XML

XML.COM – The Web Distributed Data eXchange

Seybold and O'Reilly team up to keep you informed about XML

Jan. 19, 1999: XML Namespaces by Example by Tim Bray

Mar. 8, 2000: Namespace Myths Exploded by Ronald Bourret

Aug. 4, 2000 *XML Tutorial 1: Well-Formed XML Documents* by Bonnie SooHoo

ARGH! as of 4 Aug 2000, it was available at

<http://webreview.com/pub/2000/08/04/feature/index04.html> It's really anti-social to move things without servicing the old address with a redirect. See: Cool URLs Don't Change.

### The XML FAQ

by Peter Flynn et. al. (see also: translations)

### XML Resources by James Clark

including a test suite, some software, etc.

Feb '99: note on XML Namespaces

### SAX: The Simple API for XML

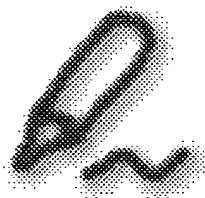
David Megginson et. al., May 1998

### ISO WG8 Materials related to the SGML Revision

Charles F. Goldfarb

Project Editor, ISO 8879

Last revised December 10, 1997



## Research Notebook

- XML Schema hacking
- Formal treatment of XML etc. using Larch
- Valid RDF: Using Namespaces with DTDs (Feb '99)
- XML Hacking by Dan Connolly (May '97)
- Notes on XML software by Bert Bos (Apr '97)
- Document Management for Web Specs
  - W3C XML Specification DTD (XMLspec)
  - discussed on spec-prod
  - spec-prod
  - a forum for discussion of management and production of for web specifications, especially the XML spec DTD archive
- SGML background on SGML, initially for readers of the HTML 2.0 specification (Nov '95) including:
  - sgml-lex: A Lexical Analyzer for HTML and Basic SGML

experimental: comments

*Created April 1997; feedback on this page to Liam Quin and site-comments  
(public archive)*



*\$Revision: 1.221 \$ \$Date: 2002/03/05 18:48:57 \$ by \$Author: liam \$*

*policy/maintenance info*

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